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## Publishing the James Goodman Irish Music Manuscript Collection: How Modern Technology Facilitated the Editors' Task

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# PUBLISHING THE JAMES GOODMAN IRISH MUSIC MANUSCRIPT COLLECTION: HOW MODERN TECHNOLOGY FACILITATED THE EDITORS' TASK

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## ABSTRACT

The paper gives a description of an important mid-nineteenth-century manuscript Irish music collection. It outlines the history of the edition and the work involved. The use of modern technology in the editorial process is considered. Undoubtedly these technological advances have been very helpful. However, they have also enlarged the scope of the project, creating new kinds of work which are seen as adding value to the product.

## 1. INTRODUCTION

This paper gives an overview of the James Goodman collection of Irish traditional music and the work undertaken by its editors in bringing about its publication, in print and on line, by the Irish Traditional Music Archive. The main focus of this paper is to consider to what extent the advent of new technology aided and expanded the task of the editors, and made the fruits of their work more accessible to the public.

## 2. CANON JAMES GOODMAN (1828–1896)

James Goodman was a native of Dingle, Co. Kerry, who spoke Irish from childhood. He was also a Church of Ireland clergyman who, towards the end of his life, was Professor of Irish at Trinity College Dublin (TCD). He was a proficient performer on the uilleann pipes.

Goodman collected a large number of local traditional piping tunes and songs in Irish. In the 1860s he compiled a very large manuscript collection of these tunes and song airs, much of it directly from live performances.

## 3. THE MANUSCRIPTS

The manuscripts (containing 2,300 tunes in four volumes) were donated after his death to the TCD Library, where they lay unpublished until 1998. As well as the tunes Goodman collected directly 'from Munster pipers' the manuscript also contains copies from borrowed manuscripts and pieces deriving directly or indirectly from printed sources.

## 4. THE WORK OF THE EDITORS

An edition was envisaged which would comprise those tunes that Goodman took from oral tradition or from lost manuscripts, reset in staff notation, with errors corrected and tunes evidently taken from printed sources

eliminated. The edition was also to provide indexes, background material and information about the individual tunes—including those not selected.

## 5. HISTORY OF THE EDITION

The piper and music scholar Breandán Breathnach carried out some preparatory work for the edition, but this was interrupted by his death in 1985. After his death the song collector and music scholar Hugh Shields took over the editing. He compiled a database of the whole collection, with eight fields containing information about the sources and structure of each tune, notes and the numerical codes devised by Breathnach (Breathnach 1982).<sup>1</sup> This database (written specially in Fortran) served as a tool for tune analysis, generating indexes and eliminating duplicates by means of Breathnach codes. It also formed the basis for the eventual online annotated index. It had a Boolean search facility which retrieved items using search terms from a combination of fields.

The Irish Traditional Music Archive (ITMA) published the first volume of the two-volume edition in 1998, edited by Hugh Shields (Shields 1998). This consisted of a selection of 516 tunes, all of which were in Goodman's own settings from local musicians, identified by Goodman himself with the letter 'K'. (His main informant seems to have been the piper Thomas Kennedy.) The volume had a biographical introduction, description of editorial procedures, musical scores and an index of the tunes.

Hugh Shields had done much preliminary work towards a second volume, and after his death in 2008 his wife Lisa undertook the editing of the second volume (Shields & Shields 2013). This was to include a further selection of over 500 tunes, an introduction about the sources, description of the manuscripts, bibliography, title index of the tunes in the edition and a further title index of all the 2,300 tunes in the manuscripts.

### 5.1 Electronic Supplements

A free supplemental index, based on the database, is available from ITMA on line as searchable PDF and

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<sup>1</sup> These codes provide a method of identifying tunes by assigning the numbers 1–7 to represent degrees of the musical scale to the stressed notes in the first couple of bars. The tonic note, usually the final, is given the number 1. Upper and lower octaves are indicated by a rule above or below the number. Anacruses and ornamentation are ignored. See Figure 1.

HTML downloads.<sup>2</sup> This gives information about the structure and provenance of each of the tunes in the whole manuscript collection, briefly indicating parallels in printed sources and modern practice of session musicians. To have printed this in the edition would have added another 70 or so pages to the book, making it unwieldy and expensive. Also there would have been no way to enter corrections or add further information to the entries.

Since the edition included a printed list of the sources referenced by abbreviations in the online index it was found necessary to put on line a free electronic version of this bibliography. This was enhanced by including some 150 live links leading directly to those publications which are publicly available in electronic format—a laborious task, but worth the extra trouble. Permanence of these online supplements is ensured by their being hosted on a stable archival website.

## 6. HOW MODERN TECHNOLOGY HELPED THE EDITORS

A cooperative publishing venture requires constant communication between the various people involved. Obviously email and the possibility of sending large files electronically via Dropbox has made the proofing and correction of text and music scores much more efficient.

### 6.1 Resources used for Recognizing Tunes from Print in order to Eliminate them

One major problem in preparing the second volume of the edition was how to identify items taken from print (including print-derived tunes copied from manuscripts Goodman had on loan). Goodman acknowledged a good few of his printed sources but on the whole he is reticent about the provenance of his tunes.

Formerly, in order to identify tunes suspected as being from print the editors would have had to travel to libraries near and far to consult rare early volumes. Between the publication of the first and second ITMA volumes (a fifteen-year gap) facsimiles of a multitude of these early music collections have become available on and freely downloadable on the Internet. Goodman has many tunes of Scottish origin, and the collections of the National Library of Scotland<sup>3</sup> have been particularly useful. The interactive online Irish collections hosted by ITMA<sup>4</sup> and Na Píobairí Uilleann (Irish pipers' organization)<sup>5</sup> are also very valuable.

#### 6.1.1 Advantages and Limitations of Breathnach Codes

The starting point in identifying tunes from print is normally the title. However, titles are notoriously variable and the same tune may have several titles. Various aids were available to the editors. Initially the editors mostly used the Breathnach codes mentioned above. These were used in Breathnach's own card index of tunes (now housed in ITMA), also by James Gore's *Scottish Fiddle*

*Index* (Gore et al. 1994) and by the very large online databases of EAMES (Colonial Music Institute 2002). The codes had the great merit in being simple and also independent of written pitch, but they had serious limitations. They took into account merely the first few bars of the first part of the tune. Problems arose too when it was not easy to discern the correct tonic for the tune, or when reels and hornpipes had been written in 2:4 rather than 4:4 or common time. Nevertheless the codes were considered useful enough to be included in the online index to the edition, with alternatives suggested in doubtful cases.

The editors found them of practical use in many ways. Being armed with a print-out of doubtful tune titles with their codes, they were able easily to recognize similar tunes in library collections being consulted. They were also able quickly to answer queries as to whether a particular melody (which might be nameless) existed in the Goodman collection. Breathnach's system predates the digital era but, if the computer could be taught to recognize the tonic reliably, the codes would (if stripped of the indications of octave position) lend themselves readily to computerized retrieval techniques.

#### 6.1.2 Electronic Tune-finding and Tune-recognizing Methods

More sophisticated web-based tune-finding strategies have recently been developed, mainly based on large internet collections of traditional dance music in ABC format<sup>6</sup> (such as the mainly Irish ones by Norbek (1996–2016) and *The Session*<sup>7</sup>). Bryan Duggan's query-by-playing *Tunepal* program<sup>8</sup> proved extremely useful in providing clues as to alternative titles and related tunes. It can recognize similarities from a short sample played instrumentally into the program from any part of the tune, with the limitation (at present) that it is dependent on the written pitch of the ABC files. An innovative newcomer not available to the editors at the time is Chris Walshaw's *TuneGraph* (like Breathnach's system this is pitch-independent, and relies mainly on the stressed notes). It is integrated into his *TuneSearch*<sup>9</sup> site (Walshaw 2015).

There are some other very good tune-finding sites based on ABC notation, a notably informative one being Andrew Kuntz's *Fiddler's Companion* (Kuntz 2003–2012). A reliable and well-organized site, but confined mainly to the era of recorded sound, is Alan Ng's *Irish Traditional Music Tune Index* (Ng 2000–2015). It is unusual in presenting results not as ABC or midi files, but as short samples of actual recorded music. It is likely that great advances will be continue to be made in the area of tune-similarity recognition (perhaps by applying some of the machine-learning techniques employed by scientists in recognizing patterns in gene sequences).

<sup>2</sup> <http://www.itma.ie/digitallibrary/print-collection/tunes-of-the-munster-pipers-vol-2>

<sup>3</sup> *Music at the NLS*. <https://archive.org/details/nlsmusic>

<sup>4</sup> <http://www.itma.ie/digitallibrary/interactivescores-all>

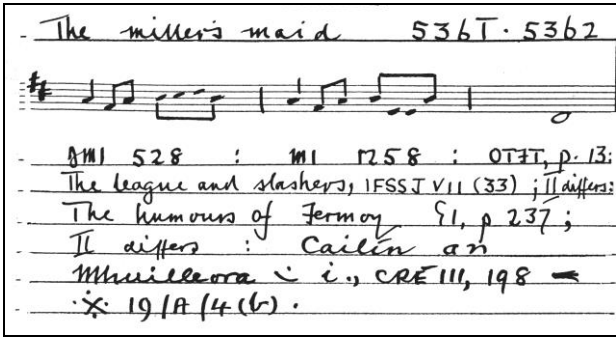
<sup>5</sup> *Irish Music Collections Online*. <http://pipers.ie/imco/>

<sup>6</sup> ABC is a convenient text-based format using the actual letters of music notes, which can be quickly displayed in staff notation. It has become the most popular file-sharing medium for music scores of traditional instrumental music. See Figure 1.

<sup>7</sup> *The Session*. <https://thesession.org/>

<sup>8</sup> *Tunepal: a Query-by-Playing Search Engine for Traditional Tunes*. <https://tunepal.org/>

<sup>9</sup> *TuneSearch*. <http://abcnotation.com/search>



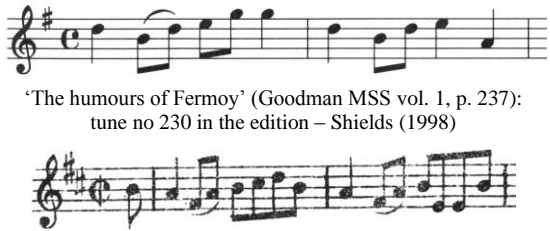
Sample of Breandán Breathnach's index card with references to tunes with the same code.

Unstressed notes are disregarded.

The tune shown above (four stresses per bar) ends in D and its tonic is D.

The number 1 (in the musical scale 1–7) is here assigned to D.

Two tunes with the same code 5361 • 5362



'The humours of Fermoy' (Goodman MSS vol. 1, p. 237):  
tune no 230 in the edition – Shields (1998)

'The miller's maid':  
tune no 528 in O'Neill (1907)

Part of the ABC notation of the second tune:

T:The miller's maid [title]  
R:Reel [type of tune]  
M:C [time signature]  
L:1/8 [default note length]  
K:D [key]  
B|A2(FA) BcdB|A2(FA) BEEB||...

**Figure 1.** Examples illustrating Breathnach code and ABC format

## 6.2 How Technology has Extended the Scope of Publications and Enabled them to Reach a Wider Audience

ITMA has included the musical content of the edition (1,051 Goodman tunes) in its free online collection of over 6,000 interactive scores produced by Jackie Small. These have now been integrated into ITMA's remarkable new *PORT*<sup>10</sup> program being developed by Piaras Hoban. This enables interactive scores to be searched simultaneously across many early Irish printed and manuscript music collections.

It is hoped that the annotated online index of the Goodman collection that emerged from the editing of Volume Two will be found valuable as a research tool. It is periodically updated so that, as new search tools are developed and existing ones improved, its usefulness will continue into the future.

## 7. CONCLUSION AND FUTURE DEVELOPMENT

The project was initiated in the pre-digital era. The recent electronic tune-finding and tune-recognition techniques would not have been particularly useful in the production of the first volume of the edition. That is because the selection of tunes was ready-made—confined to those 516 items from local Munster musicians (marked 'K' by Goodman).

Volume Two was another matter, because of the need to identify and exclude music deriving from print. In this case and in other ways modern technological conveniences have definitely been of great assistance to the editors. On the other hand, they have actually increased the work-load by making it possible to extend the scope of the publication in ways not previously possible. The labour involved in the publication and

maintenance of the online supplements and the posting of the music by ITMA on its website was felt to be justified as these enhancements add value to the production and reach a world-wide audience via the internet.

It has been gratifying to learn that ITMA has initiated a collaborative project with TCD to make facsimile digitizations of the whole Goodman manuscript music collection publicly available on the ITMA website [itma.ie](http://itma.ie). For an example of a facsimile page see Figure 2 on the next page. The digital collection will be launched at an ITMA Goodman Symposium in October 2016.



Canon James Goodman

<sup>10</sup> *Port: An ITMA Tune Resource*. <http://port.itma.ie/>



**Figure 2.** The airs of three lyric songs in Irish on the first page of the collection: ‘The bright dawn of day’, ‘The smooth hill where the dark woman lives’, ‘Breens Fort’

## 8. REFERENCES

- Breathnach, B. (1982). Between the jigs and the reels. *Ceol* V(2), 43–48 [an explanation of his system of numerical coding].
- Colonial Music Institute (2002). *Early American Secular Music and its European Sources, 1589–1839: an Index*. <https://www.cdss.org/elibrary/Easmes/Index.htm> (corrected 30 September 2004).
- Gore, C. et al., eds (1994). *Scottish Fiddle Music Index. Tune Titles for the 18th & 19th-century Printed Collections*. Musselburgh, Scotland: Amasing. (electronic version at <http://www.scottishmusicindex.org/about.asp>).
- Kuntz, A. (2003–2012) *The Fiddler's Companion*. <http://www.ibiblio.org/fiddlers/> (This has now been converted to Wiki format, enhanced and renamed *The Traditional Tune Archive*). <http://www.tunearch.org/>
- Ng, A. (2000–2015) *Irish Traditional Music Tune Index*. <https://www.irishtune.info/> (constantly updated).
- Norbeck, H. (1996–2016) *Henrik Norbeck's Abc Tunes*. <http://www.norbeck.nu/abc/>.
- O'Neill, F., ed. (1907). *The Dance Music of Ireland: 1001 Gems*. Chicago: Lyon & Healy.
- Shields, H., ed. (1998). *Tunes of the Munster Pipers: Irish Traditional Music from the James Goodman Manuscripts* [vol. 1]. Dublin: Irish Traditional Music Archive (ITMA). This has long been out of print, but a reprinting is due in summer 2016.
- Shields, H. & L., eds (2013). *Tunes of the Munster Pipers: Irish Traditional Music from the James Goodman Manuscripts* (vol. 2). Dublin: Irish Traditional Music Archive.
- Walshaw, C. (2015). TuneGraph: an online visual tool for exploring melodic similarity. In A. Maragiannis (ed.), *Proc. Digital Research in the Humanities and Arts*, (pp. 55–64). London: University of Greenwich. Retrieved 5 May 2016 from <http://www.drha2014.co.uk>